TRENDnet®

Quick Installation Guide 🇺🇸 🇬🇧

TEW-653AP
1.01

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• Multi-Language Quick Installation Guide
• CD-ROM (User's Guide)
• Cat. 5 Ethernet Cable (1m / 3.3ft.)
• Power Adapter (12V DC, 1A)
• Mounting Kit

System Requirements

• Web Browser: Internet Explorer (6.0 or higher)
• A computer with a network adapter properly installed.
• A network Switch or Hub with an available network LAN port.
• Power over Ethernet (PoE) Switch (e.g. TPE-80WS) (Optional)
• Injector (e.g TPE-111GI) (Optional)

Note:
The TEW-653AP only works with Power over Ethernet (PoE) devices that follow the IEEE 802.3af standard.
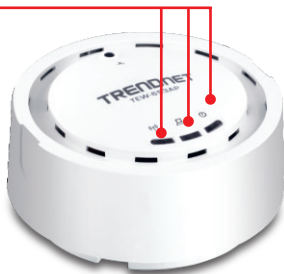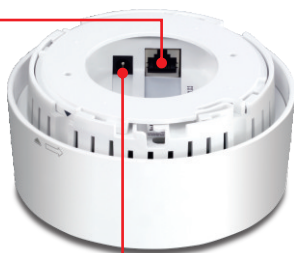
2. Hardware Installation

Note: Locate an optimum location for the Access Point. The best place for the Access Point is usually at the center of your wireless network. Please connect the computer configuring the TEW-653AP to the same switch/hub.

1. Run a RJ-45 cable and the power adapter through the cable clip on the TEW-653AP.

2. Connect the RJ-45 cable from the Switch/Hub to the **LAN** port on the Access Point.

3. Connect the Power Adapter to the Access Point and then to a power outlet.

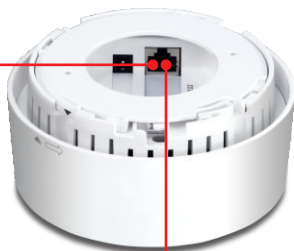**4.** Verify that the wireless, LAN and power LEDs are on.

Using the TEW-653AP with a PoE switch

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1. Connect a RJ-45 cable from the Power-Over-Ethernet Switch (e.g. TRENDnet TPE-80WS) to the **LAN** port on the Access Point.

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2. Verify that the wireless, LAN and power LEDs are on. Please refer to step 4 in the Hardware Installation section.

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Using the TEW-653AP with the TPE-111GI

1. Connect the **Power Cord** to the **Power Adapter.**
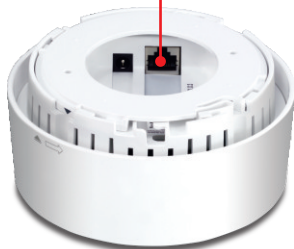
2. Connect the **Power Adapter** to the **DC 48V IN** connector on the TPE-111GI. Then connect the **Power Cord** to an outlet.

3. Connect a CAT-5 cable from a switch to the TPE-111GI's **DATA IN** port.

4. Connect a CAT-5 cable from the TEW-653AP's **LAN** port to the TPE-111GI's **PoE Out** port.
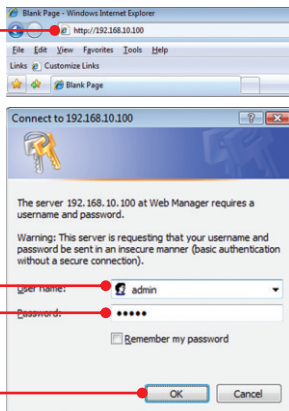
5. Verify that the wireless, LAN and power LEDs are on. Please refer to step 4 in the Hardware Installation section.

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<u>Note</u>: It is recommended that you configure the Access Point from a wired computer. Before the Access Point can be configured, a Static IP address must be assigned to your computer's network adapter in the subnet of 192.168.10.X. Since the Access Point's default IP address is 192.168.10.100, make sure no other network devices are assigned an IP address of 192.168.10.100. (Refer to Troubleshooting section on how to configure TCP/IP settings on your PC.)
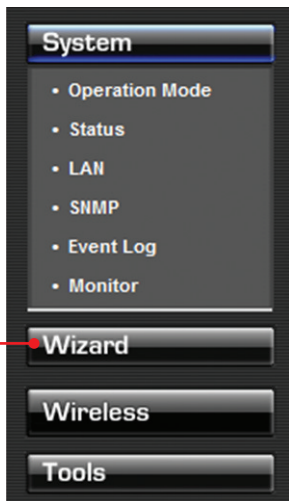
1. Open your web browser, type **http://192.168.10.100** in the Address bar, and then press **Enter**.
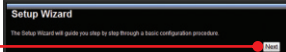
2. Enter the User name and Password, and then click **OK**. By default:

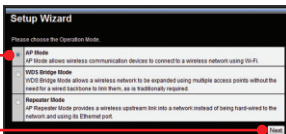　User Name: **admin**
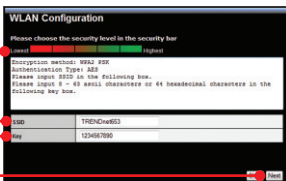　Password:　 **admin**

3. Click **Wizard**.

4. Click **Next**.

5. Select **AP Mode** and then click **Next**.

Setup Wizard
Please choose the Operation Mode.
AP Mode
AP Mode allows wireless communication devices to connect to a wireless network using Wi-Fi.
WDS Bridge Mode
WDS Bridge Mode allows a wireless network to be expanded using multiple access points without the need for a wired backbone to link them, as is traditionally required.
Repeater Mode
AP Repeater Mode provides a wireless upstream link into a network instead of being hard-wired to the network and using its Ethernet port.
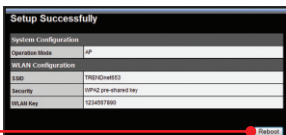Next

Note:
1. To protect your network from any unauthorized access it is recommended to enable wireless encryption.
2. The examples below are for WPA2-PSK security. If you select WPA-PSK or WPA2-PSK, make sure your wireless adapters support WPA or WPA2. If your wireless adapters do not support WPA or WPA2, then select WEP.

6. Use your mouse to select the desired security level (lowest for no encryption, highest for WPA2-PSK).

WLAN Configuration
Please choose the security level in the security bar
Lowest ▮▮▮▮▮▮▮▮▮▮ Highest
Encryption method: WPA2 PSK
Authentication Type: AES
Please input SSID in the following box.
Please input 8 ~ 63 ascii characters or 64 hexadecimal characters in the following key box.

| SSID | TRENDnet653 |
| Key | 1234567890 |

Next

7. Enter the desired **SSID** and **Key**. Then click **Next**. By default, the SSID is TRENDnet653.

8. Setup is successful. Click **Reboot**.

Setup Successfully

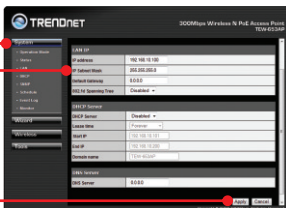| System Configuration | |
Operation Mode	AP
WLAN Configuration	
SSID	TRENDnet653
Security	WPA2 pre-shared key
WLAN Key	1234567890

Reboot

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9. Wait 24 seconds while the Access Point reboots.

System is rebooting, please wait 24 seconds

10. Click **System -> LAN**. Configure the LAN settings to match your network settings and then click **Apply**.

11. Wait 14 seconds while the Access Point reboots.

System is rebooting, please wait 14 seconds

Your configuration is complete

For detailed information regarding the **TEW-653AP's** configuration and advanced settings, please refer to the Troubleshooting section, User's Guide CD-ROM, or TRENDnet's website at http://www.trendnet.com.

Register Your Product

To ensure the highest level of customer service and support, please take a moment to register your product Online at: **www.trendnet.com/registe**r
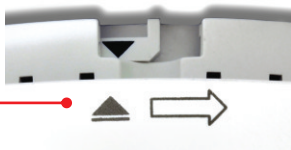
Thank you for choosing TRENDnet

5. Mounting

1. Use the mounting plate as a template and mark the wall for the correct screw position.

2. Drill holes for the screws at the marked positions on the wall.

3. Use the provided wood screws to secure the mounting plate to the wall.

4. Align the TEW-653AP with the mounting plate

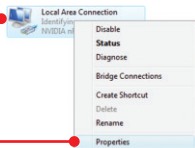**5.** Follow the arrow to secure the TEW-653AP to the mounting plate.

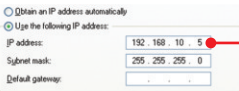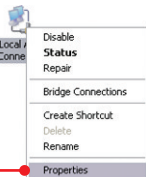**How do I configure TCP/IP settings on my computer?**

<u>Windows Vista</u>

1. Go into the **Control Panel**, click **Network and Internet**, click **Network and Sharing Center**, click **Manage Network Connections** and then right-click the **Local Area Connection** icon and then click **Properties**.

2. Click **Internet Protocol Version 4(TCP/IPv4)** and then click **Properties. Then** click on **Use the following IP address**, and make sure you assign your network adapter an IP address in the subnet of 192.168.10.x.

<u>Windows XP/2000</u>

1. Go into the **Control Panel**, double-click the **Network Connections** icon and then right-click the **Local Area Connection** icon and then click **Properties**.

2. Click **Internet Protocol (TCP/IP)** and then click **Properties. Then** click on **Use the following IP address**, and make sure you assign your network adapter an IP address in the subnet of 192.168.10.x.

I typed http://192.168.10.100 in my Internet Browser's Address Bar, but an error message says "The page cannot be displayed." How can I get into the TEW-653AP's web configuration page?

1. Check your hardware settings again by following the instructions in section 2
2. Make sure the wireless, LAN and power LEDs are lit.
3. Make sure the TCP/IP settings are configured properly (see first question).
4. Since the Access Point's default IP address is 192.168.10.100, make sure that no other network devices are assigned an IP address of 192.168.10.100.
5. Reset the TEW-653AP. Take a pin or paper clip and press the reset button for 15 seconds. The reset button is located on top of the TEW-653AP.

If my network's IP is different than the Access Point's range, what should I do?
You should still configure the Access Point first. After all the settings are applied, go to the Access Point's configuration page, click on **System,** click on **LAN** and change the IP address of the Access Point to match your network's IP.

After I successfully configured the Access Point to match my network settings, I can not connect to my network using wireless computers.
If you have a DHCP server in your network, you need to go into TCP/IP settings again and re-select "Obtain an IP address automatically" to allow the PC to regain an IP address from your DHCP server.

All the settings are correct, but I can not make a wireless connection to the Access Point.
1. Double check that the wireless LED on the Access Point is lit.
2. Power cycle the Access Point. Unplug the power to the Access Point. Wait 15 seconds, then plug the power back in.
3. Contact the manufacturer of your wireless network adapter. Make sure the wireless network adapter is configured with the proper SSID. The default SSID of the Access Point is **TRENDnet653.**

The TEW-653AP does not power on when I plug the device into a Power-Over-Ethernet switch or splitter. What should I do?
1. Verify that the TEW-653AP powers up using the provided 12V, 1A power adapter.
2. Power cycle the PoE switch.
3. Unplug power to the switch, wait 15 seconds, then plug the power back in.
4. Plug the device into a different port on the PoE switch.
5. Try using another Cat-5e cable.

If you still encounter problems or have any questions regarding the **TEW-653AP,** please contact TRENDnet's Technical Support Department.

The following are some general wireless tips to help minimize the impact of interference within an environment.

Assign your network a unique SSID
Do not use anything that would be identifying like "Smith Family Network". Choose something that you would easily identify when searching for available wireless networks.

Do not turn off the SSID broadcast
The SSID broadcast is intended to be on and turning it off can cause connectivity issues. The preferred method of securing a wireless network is to choose a strong form of encryption with a strong and varied encryption key.

Note: after setting up the SSID, encryption type and encryption key/passphrase, please make a note of them for future reference. You will need this information to connect your wireless computers to the wireless router/access point.

Change the channel
Most wireless access points and routers are defaulted to channel 6. If you have a site survey tool that will display the channels you can plan your channel selection around neighboring access points to minimize interference from them. If your site survey tool does not display the channel try using channels 1 or 11.

Change the channel bandwidth
If you are using an 802.11n router or access point you can also make the following changes. Change the channel bandwidth to 20/40MHz. This will provide the highest possible performance using an 802.11n device. Also, if using 802.11n you should be securing the network with WPA2 security.

Note: Due to Wi-Fi certification considerations if you choose WEP, WPA or WPA2-TKIP encryption this device may operate in legacy wireless mode (802.11b/g). You may not get 802.11n performance as these forms of encryption are not supported by the 802.11n specification.

Avoid stacking hardware on top of each other to prevent overheating issues
Maintain enough free space around the hardware for good ventilation and airflow. There should also be plenty of free space around the antennas to allow the wireless signal to propagate. Please also make sure that the wireless hardware is not placed in any type of shelving or enclosures.

There are a number of other environmental factors that can impact the range of wireless devices.

1. Adjust your wireless devices so that the signal is traveling in a straight path, rather than at an angle. The more material the signal has to pass through the more signal you will lose.

2. Keep the number of obstructions to a minimum. Each obstruction can reduce the range of a wireless device. Position the wireless devices in a manner that will minimize the amount of obstructions between them.

3. Building materials can have a large impact on your wireless signal. In an indoor environment, try to position the wireless devices so that the signal passes through less dense material such as dry wall. Dense materials like metal, solid wood, glass or even furniture may block or degrade the signal.

4. Antenna orientation can also have a large impact on your wireless signal. Use the wireless adapter's site survey tool to determine the best antenna orientation for your wireless devices.

5. Interference from devices that produce RF (radio frequency) noise can also impact your signal. Position your wireless devices away from anything that generates RF noise, such as microwaves, HAM radios, Walkie-Talkies and baby monitors.

6. Any device operating on the 2.4GHz frequency will cause interference. Devices such as 2.4GHz cordless phones or other wireless remotes operating on the 2.4GHz frequency can potentially drop the wireless signal. Although the phone may not be in use, the base can still transmit wireless signals. Move the phone's base station as far away as possible from your wireless devices.

If you are still experiencing low or no signal consider repositioning the wireless devices or installing additional access points. The use of higher gain antennas may also provide the necessary coverage depending on the environment.

Declaration of Conformity

TRENDnet

Company Information:

Company Name:
TRENDware International, Inc.

Company Address:
20675 Manhattan Place
Torrance, CA 90501
USA

Product Information:

Product Description:
300Mbps Wireless N PoE Access Point

Model Number:
TEW-653AP

Brand name:
TRENDnet

Technical Standards:

EN 300 328   V1.7.1: 10-2006
EN 301 489-1   V1.8.1: 04-2008
EN 301 489-17 V1.3.2: 04-2008
EN 50385: 2002
EN 60950-1: 2006

Declaration:

The product is herewith confirmed to comply with the requirements of Directive 1999/5/EC of the Council (European Parliament) on the radio and telecommunications terminal equipment.

I hereby declare that the products and devices mentioned above are consistent with the standards and provisions of the guidelines.

Sonny   Su

Name (Full Name)

October 9, 2009

Date

Director of Technology

Position / Title

Legal Signature

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Certifications

This equipment has been tested and found to comply with FCC and CE Rules.
Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received. Including interference that may cause undesired operation.

FC CE P G

Waste electrical and electronic products must not be disposed of with household waste. Please recycle where facilities exist. Check with you Local Authority or Retailer for recycling advice.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

ADVERTENCIA
En todos nuestros equipos se mencionan claramente las caracteristicas del adaptador de alimentacón necesario para su funcionamiento. El uso de un adaptador distinto al mencionado puede producir daños fisicos y/o daños al equipo conectado. El adaptador de alimentación debe operar con voltaje y frecuencia de la energia electrica domiciliaria existente en el pais o zona de instalación.

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